

98-1-1/20

Further Development of Power Engineering in the USSR and Projected Construction of Hydroelectric Power Plants

The most advantageous sites for the construction of hydroelectric power plants on the western Dwina are located near Plavinas and Vitebsk. Plants on the Neman river are to serve the Kaliningrad area and the Lithuanian SSR, while the Verkhne-Tuloma station on the Tuloma river is to supply the Kola grid. Construction of several hydroelectric power plants in the Caucasus will utilize the rich water resources of that part of the USSR. To accomplish construction of all mentioned projects, faster and improved construction methods have to be applied. To lower costs, local building materials and prefabricated parts have to be used to a greater extent, and the construction of buildings associated with the power plants, which constitute 30% of the total expenditures on the average, will have to be reduced in the future.

There is 1 table.

ASSOCIATION: Ministerstvo elektrostantsiy SSSR (USSR Ministry of Electric Power Plants)
AVAILABLE: Library of Congress

Card 5/5

PAVLENKO, A.S.

Lenin's legacy on the electrification of the country is
coming true. Energ.stroi. no.5:3-6 '58. (MIRA 12:5)

1. Ministr elektrostantsiy SSSR.
(Electrification)

ZASYAD'KO, A.F.; KUCHERENKO, V.A.; PAVLENKO, A.S.; GRISHMANOV, I.A.;
FROLOV, V.S.; SHASHKOV, Z.A.; YEFREM'OV, M.T.; SNIIEOV, M.S.;
CHIZHOV, D.G.; NOVIKOV, I.T.; NOSOV, R.P.; ASKOCHINSKIY, A.N.;
MEKRAZOV, A.M.; LAVRENENKO, K.D.; TARASOV, N.Ya.; GABDANK, K.A.;
LEVIN, I.A.; GINZBURG, S.Z.; ALEKSANIROV, A.P.; KOMZIN, I.V.;
OZEROV, I.N.; SOSNIN, L.A.; BELYAKOV, A.A.; NAYMUSHIN, I.I.;
INYUSHIN, M.V.; ACHKASOV, D.I.; RUSSO, G.A.; DROBYSHEV, A.I.;
PLATONOV, N.A.; ZHIMERIN, D.G.; PROMYSLOV, V.F.; KRISTOV, V.S.;
SAPOZHNIKOV, F.V.; KASATKIN, M.V.; ALEKSANDROV, M.Ya.; KOTILEVSKIY,
D.G.

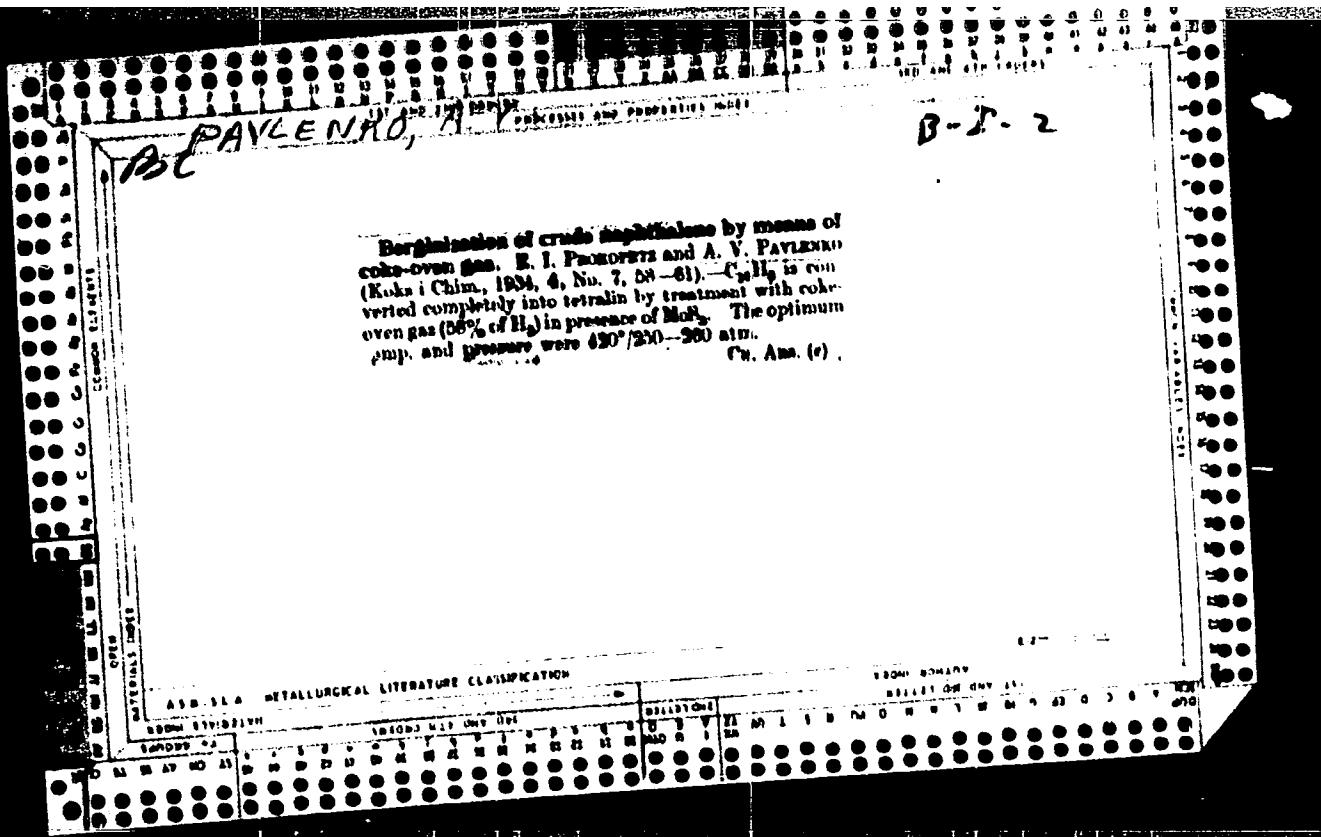
Fedor Georgievich Loginov; obituary. Elek.sta. 29 no.8:1-2
(MIRA 11:11)
Ag '58. (Loginov, Fedor Georgievich, 1900-1958)

NOVIKOV, I.T.; PAVLENKO, A.S.; SMIRNOV, M.S.; CHIZHOV, D.G.; LAVRENENKO,
K.D.; NEKRASOV, A.M.; NOSOV, R.P.; TARASOV, N.Ya.; ZHIMERIN, D.G.
UGORETS, I.I.; DMITRIYEV, I.I.; DROBYSHEV, A.I.; YEMAIKOV, V.S.;
SAPOZHNIKOV, P.V.; BOROVAY, A.A.; BANNIK, V.P.; DASKOVSKIY, Ya.M.;
BOGOVIN, N.A.; PETROV, A.N.; MEL'NIKOV, B.V.; LATYSH, D.I.;
ZONIN, P.P.; DYDYKIN, P.Ye.; BONDAREV, I.I.; GUMENYUK, D.L.;
POBEDAYLO, K.M.

Ol'ga Sergeevna Kalashnikova; obituary. Elek.sta. 30 no.2:95
(MIRA 12:3)
F '59.
(Kalashnikova, Ol'ga Sergeevna, 1914)

NEWCASTV, A.M., inzh.; RYVINSK, A.S., inzh.

Accelerating tem. for electric power engineering program.
Teploenergetika no. 10 (1981) (A.S.)
(Power engineering)



P.C.

Mechanism of high-temperature hydrogenation of aromatic hydrocarbons. I. Anthracene and phenanthrene hydrides. II. Crystalline dihydronaphthalenes, and their Semireduced. III. Composition of the liquid product formed together with symmetrical dihydroanthracene, and the dehydrogenation of the latter. E. I. PROKOF'EV, A. V. PAVLENKO, and B. M. BOGDANOVICH. IV. Mechanism of reactions of anthracene catalyzed by. V. Preparation of liquid polyphenanthrenes. E. I. Prokof'ev and B. M. Bogdanovich [J. Russ. Chem. Soc., 1898, 21, 420-434; 500-505, 520-525, 567-580, 580-585].—I. The products of hydrogenation (100-150 atm.; Mo₂ catalyst) of anthracene (I) are 9 : 30, di. (II), 1 : 2 : 3 : 4-tetra. (III), o-octo. (IV) and perhydroanthracene (V) (solid and liquid); the amount of Mo remaining rises as the temp. is raised from 200° to 400°. Under analogous conditions phenanthrene (VI) yields 1 : 2 : 2 : 4-tetra., 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8-octa. (VII), and perhydrophenanthrene (VIII); dihydrophenanthrene is not obtained. The temp. at which max. yields of any desired hydride are obtained are determined, and the

prop. of the pure hydrides is described.

II. (IV), as obtained by low-temp. (250-285°) hydrogenation of (I), (III), or (VII), is contaminated with anthracene/phenanthrene [anthracene-1 : 2 : 3 : 4 : 5 : 6 : 9 : 10-anthracene-10,11-dihydro] (IX), m.p. 68-5°, oxidized by KMnO₄, to α,β,β,β -tetracarboxylic acid.

III. The liquid product of catalytic hydrogenation of (I) at 300° consists of solid and liquid (V), (IV), (IX), and (VII). (IV) undergoes transformation into (VII) in presence, but not in absence, of MoS₂.

IV. The reaction (IV) $\xrightarrow{\text{H}_2}$ (IX) is demonstrated at 200°, in presence of MoS₂.

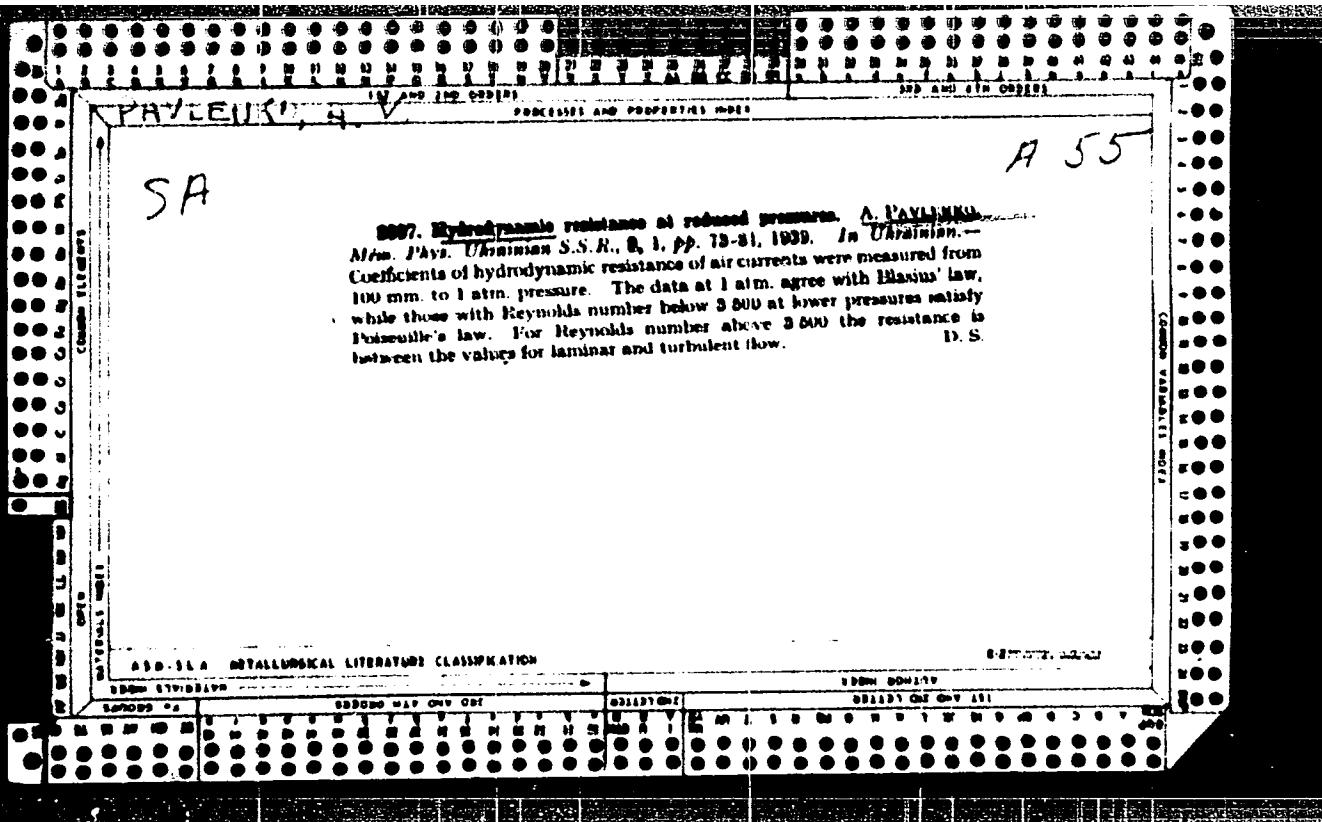
V. Liquid (V) is dehydrogenated (Ni-Al catalyst) to a mixture of (II) and (VI). It is hence concluded that (VIII) is a product of high-temp. hydrogenation of (I).

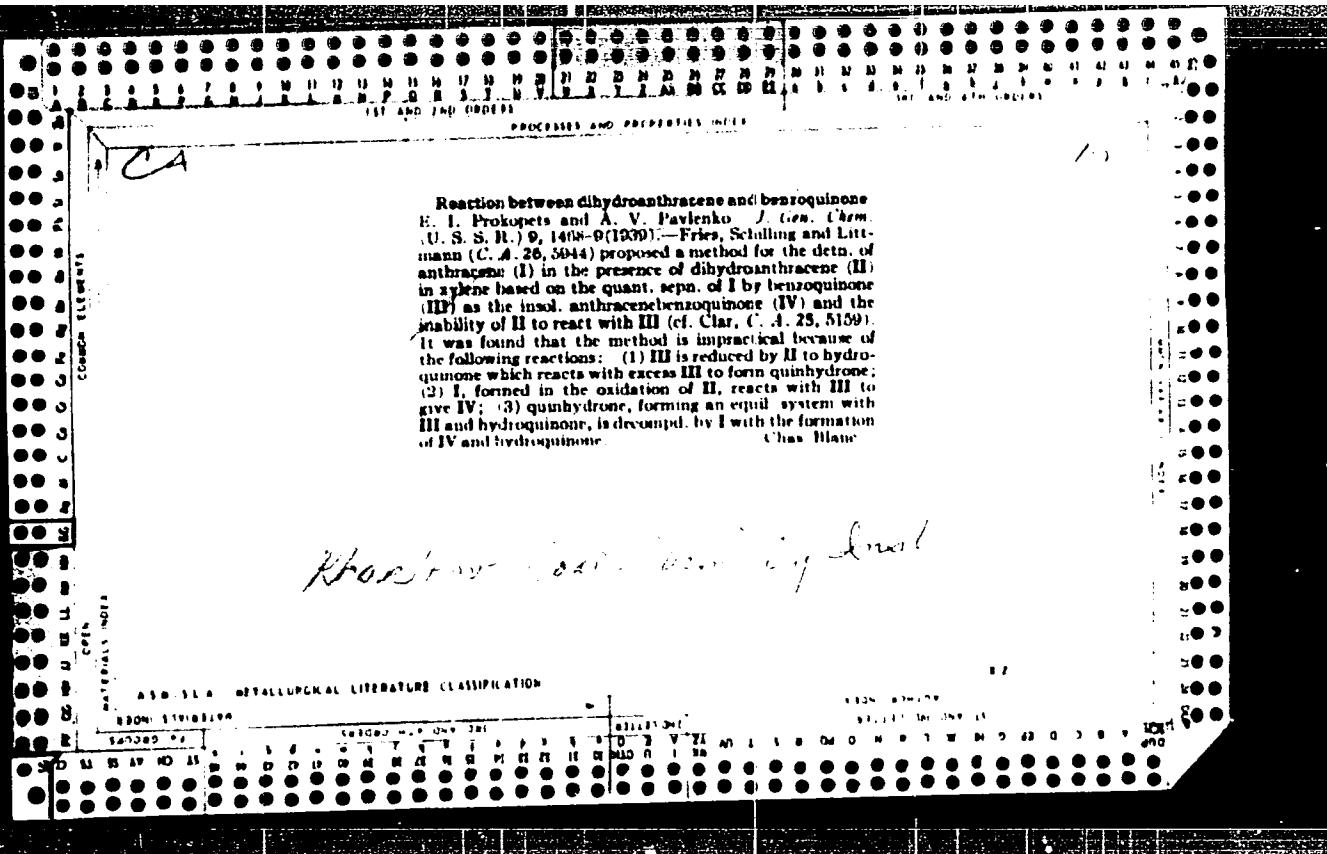
R. T.

H.3

AIR-ELA METALLURGICAL LITERATURE CLASSIFICATION

ABM SYMBOLS										FROM BOMAR									
ABM SYMBOLS					SUBNO HAT ODT ODT					BOMAR ODT					FROM BOMAR				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18





USSR/Engineering - Measuring instruments

Card 1/1 Pub. 128 - 5/26

Authors : Pavlenko, A. V., and Fedorov, A. V.

Title : Measuring the thickness of the lubricating layer of plastic bearings during their lubrication with water

Periodical : Vest. mash., 2, 28-29, Feb 1954

Abstract : A general description is presented of the ETMP-48 instrument used for measuring the thickness of nonmagnetic coatings on ferromagnetic components, and to measure the thickness of the lubricating layer between the shaft journal and the bearing. Graph; diagram; drawings.

Institution :

Submitted :

Translation from: Referativnyy zhurnal Mekhanika, 1958 Nr 3, p61 (USSR)

AUTHOR: Pavlenko, A V

TITLE: Determination of Deformations of a Plastic Journal Bearing Due to Hydrodynamic Pressure (Oprudeleniye deformatsiy plastmas sovogo podshipnika skol'zheniya ot deystviya gidrodinamicheskogo davleniya)

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta 1956 Vol 10 Nr 3
pp 107-114

ABSTRACT: As demonstrated by experiments, a dimple is formed on the surface of a plastic bearing in the zone of maximum hydrodynamic pressures, which dimple helps to increase to some extent the minimum thickness of the lubricating film as compared to that obtained with a metallic insert lining

Reviewer's name not given

PETRICHENKO, Valentin Kuz'mich; PAVLENKO, A.V., otv.red.; SINYAVSKAYA, Ye.K., red.izd-va; LIBERMAN, S.S., red.izd-va; ANDRIYEV, S.P., tekhn.red.

[Construction and utilization of textolite bearings for rolling mills] Ustroistvo i eksploatatsiya tekstolitovykh podshipnikov prokatnykh stanov. Khar'kov, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1960. 167 p.

(MIRA 13:12)

(Plastic bearings)

PAVLENKO, A.V., kand.tekhn.nauk

Investigating the effect of the size of a diametral gap on the
performance of wooden sliding bearings. Izv.vys.ucheb.zav.;
mashinostr. no.4:119-123 '61. (MIRA 14:6)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut.
(Wooden bearings)

L 38444-66

ACC NR: AP6018315 (A) SOURCE CODE: UR/0256/65/000/011/0068/0069

AUTHOR: Danilov, M. D. (Engineer, Colonel); Pavlenko, A. V. (Senior technician, Lieutenant)

ORG: None

34
B

TITLE: Automatic temperature regulator

SOURCE: Vestnik protivovozdushnoy oborony, no. 11, 1965, 68-69

TOPIC TAGS: temperature regulator, temperature control, thermostat,
automatic control

ABSTRACT: The authors describe a thermostatic system for controlling temperatures in small rooms, vehicle bodies, mobile radio stations, etc. The system being composed of standard parts can easily be assembled by regular military workshops. A fixed-temperature control is realized by means of two mercury-tube relays maintaining the temperature between 6 and 20 C. The relays actuate a heating circuit consisting of two heaters equipped with a 1-kw fan. The system is fed from a three-phase, 220-v, 50 cps source. The relay circuit is

Card 1/2

PAVLENKO, A.Ya., gornyy tekhnik-elektromekhanik

System for mechanical washing of storage batteries. Ugol'
Ukr. 6 no.1:41 Ja '62. (MIRA 15:2)
(Storage batteries—Cleaning)
(Mine railroads)

TUKANOV, E.F. [TSukanov, Ye.F.]; IVANCENKO, F.K. [Ivanchenko, F.K.];
PAVLENKO, B.A.; NIKOLAEV, V.A. [Nikolayev, V.A.]

Studies of the pressure in section mills. Analele metallurgie
16 no.4:133-136 O-D '62.

PAVLENKO, B.A., kand. tekhn. nauk.

Determining the position of blast furnace bell control mechanism
elements. Inv. vys. ucheb. zav.; chern. met. no. 4:153-161 Ap '58.
(MIRA 11:6)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Blast furnaces) (Governors (Machinery))

IVANCHENKO, F. K.; RAVLENKO, B. A., ZHERNAGUR V. D.; AFANASYEV, V. A.

Experimental investigation of pressures - fed by sliding
saws during the cutting of heated metal. Izv. vys. ucheb.
zav.; chem. met. 7 no.6:207-212 '64. (VIIA 17.1)

1. Dneprozerzhinsk'iy zavod "Duz."

GREBENIK, V.M.; ZHERNACHUK, V.D.; IVANCHENKO, F.K.; PAVLENKO, B.A.

Experimental investigation of converter tilting moments.
Izv. vys. ucheb. zav.; chern. met. 6 no.2:165-175 '63.
(MIRA 16:3)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz.
(Converters—Models)

GREBENIK, V.M.; ZHERNACHUK, V.D.; IVANCHENKO, F.K.; PAVLENKO, B.A.

Investigating the turning mechanism of a 1300-ton mixer. Izv.
vys. ucheb. zav.; chern. met. 6 no.7:183-190 '63. (MIRA 16:9)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz.
(Mixing machinery--Electric driving)

PAVLENKO, B. A.

133-58-4-17/40

AUTHORS: Tsukanov, E.F., Ivanchenko, F. K. and Molotkov, I.F.,
Docents, Pavlenko, B. A., Nikolayev, V. A.,
Krizhanovskiy, A. L. and Kokhno, P. Ya., Engineers

TITLE: Investigation of Loads During Rolling Plates
(Issledovaniye davleniya pri prokatke listov)

PERIODICAL: Stal', 1958, Nr 4, pp 332-334 (USSR)

ABSTRACT: The measurements of rolling loads endured by rolls in a medium plate mill during rolling plates were carried out. The mill consisted of two stands in line: three rolls (LAUT) for rolling plates and two-rolls for riffling plates. In the three roll mill 670 x 517 x 670 mm for rolling smooth plates cast iron rolls with a chilled surface are used and for riffled plates, forged steel rolls (50 Kg). The length of rolls 1800 mm. In the two roll stand in which only one pass is made for riffling, cast iron rolls of 650 mm diameter with chilled surface are used. The mill is powered with a 900 h.p. motor. Riffled plate was rolled in 10-12 passes and smooth plates in 11-13 passes. Measurements of loads on rolls were carried out during rolling plates (dimensions in Table 1) and the most characteristic results are given Card 1/2 in Table 2. Experimental results are compared in Figs. 1-3.

Investigation of Loads During Rolling Plates 133-58-4-17/40

Conclusions: During intensive reductions in cast iron chilled rolls stresses are formed considerably exceeding the permissible ones. Specific load on rolls $5-6 \text{ kg/mm}^2$ at the beginning of rolling increases at the end of rolling to $28-30 \text{ kg/mm}^2$. During rolling on steel rolls the specific load is higher than on rolling on cast iron rolls (due to an increase in friction in the former case). During rolling comparatively thin products ($H < 33 \text{ mm}$) the maximum specific pressure was observed at reductions of 34-40%. With further increase in reduction the specific load decreases.

There are 2 tables, 3 figures and 3 references, all of which are Soviet.

ASSOCIATIONS: Dnepodzerzhinskiy vecherniy metallurgicheskiy institut (Dneprodzerzhinsk Evening Metallurgical Institute) and zavod im. Dzerzhinskogo (Works imeni Dzerzhinskogo)

1. Rolling mills--Operation 2. Plates--Rolling 3. Rolling mills--Stresses

Card 2/2

NIKOLAYEV, V.A.; IVANCHENKO, F.K.; TSUKANOV, E.F.; PAVLENKO, B.A.;
CHEPELEV, P.M.

Investigating applied stresses during rolling on rail and
structural steel mills. Stal' 23 no.10:924-925 O '63.
(MIRA 16:11)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz i zavod im.
Dzerzhinskogo.

PAVLENKO, B.A.,
TSUKANOV, B.P., dots.; IVANGHENKO, F.K., dots.; MOLOTKOV, L.P., dots.;
PAVLENKO, B.A., inzh.; NIKOLAEV, V.A., inzh.; KHIZHANOVSKIY, A.L.,
inzh.; KOKHNO, P.Ya., inzh.

Investigating pressures during plate rolling (with summary in
English). Stal' 18 no.4:332-334 Ap '58. (MIRA 11:5)

1. Dneprodzerzhinskiy vecherniy metallurgicheskiy institut i
Zavod im. Dzerzhinskogo.
(Rolling (Metalwork))

3/13/61/000/005/014/060
A006/A106

AUTHORS: Ivanchenko, F.K., Molotkov, L.P., Tsukanov, E.P., Nikolayev, V.A.,
Pavlenko, B.A.

TITLE: Measurement of pressure on a medium-sheet mill and new conditions
of reduction

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no.5, 1961, 4, abstract 5D26
("Sb.tr. Dneprodzerzh. vech. metallurg. in-ta", 1960, v.2, 139-145)

TEXT: The authors present a short description of the mill which consists
of two stands: a fourth three-high mill - for the broaching of a smooth sheet,
and a two-high mill for the rolling of a corrugated sheet. During the investiga-
tions the temperature and pressure of the metal on the rolls were measured when
rolling smooth sheets of 4 x 1,400 x 4,200 mm dimensions and C7 .3 (St.3) cor-
rugated steel sheets of 5 x 1,100 x 6,000 mm. The experimental results were used
to calculate new conditions of reduction which make it possible to raise the ef-
ficiency of the mill by 15 - 20%. V. P.

[Abstracter's note: Complete translation]

Card 1/1

IVANCHENKO, Fedor Kondrat'yevich; PAVLENKO, Boris Aleksandrovich;
YEZDOKOVA, M.L., red. izd-va; MIKHAYLOVA, V.V., tekhn. red.

[Mechanical equipment in steel-smelting shops] Mekhaniches-
koe oborudovanie staleplavil'nykh tsekhov. Moskva, Izd-vo
Metallurgija, 1964. 440 p. (MIRA 17:4)

PATENK, Boris Viktorovich, (2), July 19

Engineer, People's Economic Council - Naval
Machine Building (1976)

Mrs. Sov. Foreign Intelligence, "Russia", 1976

Soviet Ambassador to "The Soviet Union Inter-Union"
(1976) received from Sov. (1). - p. 1 - 2.

PAVLENKO, D.

Electrification of Latvia in the sixth Five-Year Plan. p. ??,
PADONJU LATVIJAS KOMUNISTS, Riga. Vol. 11, no. 3, Mar. 1956.

SOURCE: East European Acession List (EEAL) Library of Congress
Vol. 5, no. 8, August 1956.

MURATOV, V.; PAVLENKO, D.

Piece rate wages for the entire brigade in prospecting. Sots.
trud 6 no.9:56-61 S '61. (MIRA 14:9)
(Prospecting) (Piecework)

PAVLENKO, D.D., gornyy inzh.

How we organized mining at high speed rates. Ugol' Ukr. 4
no.2:34 7 '60.
(MIRA 13:6)
(Donets Basin--Coal mines and mining--Labor productivity)

The effect of the heterogeneity of steel ingots on the grain of austenite. D. P. Pavlenko, Teoriya Prakt. Met., 12, No. 7, 38-41 (1940).—The macro- and microheterogeneities of steel are connected with the size of the austenite grain, which can be used as a criterion for the destr. of the properties of various zones of a steel ingot. A preliminary destr. of the grain size in several samples of hammered steel showed that the steel cemented irregularly and the grains were of a mixed size. There are several definite types of columnar crystals and several zones of unoriented crystals. The striae zone was analyzed in detail and its relation to periodic crystals of steel and the existence of a special zone of "periodicity" was destr. There is a definite connection between the structural zonality and the heterogeneity of the austenite grain and the nonmetallic inclusions. The nonmetallic inclusions are centers of crystals of secondary cementite, which is distributed along the edges of the austenite grain. A method was developed for simultaneous destr. of the heterogeneity of steel ingots and the austenite grain.

W. R. Henn

9

REF ID: A6425

ASME-SEA METALLURGICAL LITERATURE CLASSIFICATION

ECONOMIC POINTS

PAVLENKO, D.K.

The electrification of the Latvian Republic should have unified control. Elek. sta. 33 no.7:2-4 Jl '62. (MIRA 15:8)

1. Nachal'nik Upravleniya energeticheskogo khozyaystva Soveta narodnogo khozyaystva Latviyskoy SSR.
(Latvia—Electrification)

The effect of drugs on bile secretion. Yury A. Petrovskii and D. S. Pavlenko. *Bull Biol and Med U.S.S.R.* 7, 40-41 (1959) (in English).²³ The increase in bile secretion (I) as a result of the simultaneous administration of bile as a const. physiol. stimulus and various drugs was studied. Urotropine (1.0-1.2 g.) caused a 20% increase in I, with small changes in bilirubin (II) and cholesterol (III). Cholic acids (IV) increased 4-10 mg. %, changing the III/IV coeff. from 1.00 to 1.12. Atropine (0.5 g.) increased I and its sp. gr., II and III showed little change, while IV increased 100-300 mg. %. Rhubarb (0.5 g.) caused a small increase in I, which increased on the 2nd day from 14.8 to 23 cc. Little change was observed in III while II increased 3-4 µg. %, with a considerably greater increase in IV. Aloë (0.5 g.) caused a slight decrease in I, with little change in II, III and IV. Podophyllin (0.03 g.) caused an increase in the sp. gr. of I, a 14% increase in II, a 300 mg. % increase in IV and a change of the III/IV coeff. from 1.02 to 1.87. Menthol (10 drops) caused a slight increase in the sp. gr. of I, an increase in II and a considerably greater increase in IV. Anise oil (10 drops) caused a decrease in I, with an increase in II and IV and no change in III. Carvone (10 drops) caused a slight increase in I, II and IV with no change in III. Thymol (10 drops) caused no change in I, with slight increases in II and III. In some cases IV increased by 100-200 mg. %. Dianadi's mixture (10 drops) caused an appreciable increase in I and II with a slight increase in IV and no change in III. Isenituki No. 17 caused slight changes in I, with a decrease in II and a small increase in IV. S. A. K.

PAVLENKO, Dmitriy Makarovich

[Organization of work and wages in prospecting work] Or-
ganizatsiia truda i zarabotnoi platy na gornorazvedochnykh
rabitakh. Moskva, Gosgeoltekhnizdat, 1963. 187 p.
(MIRA 17:6)

DOROKHOV, Ivan Petrovich; LUTOV, Aleksey Antonovich; PAVLENKO, Dmitriy
Vasil'yevich; CHABAN, O.I., red.; GORKAVENKO, L.I. Horkavenko,
L.I., tekhn. red.; LAGUTIN, I.T. [Lahutin, I.T.], tekhn. red.

[Manual on the calculation of timber and forest production]Do-
vidnyk z obliku lisomaterialiv i lisovoi produktsii. [By] I.P.
Dorokhov ta inshi. Kyiv, Derzh.vyd-vo tekhn.lit-ry URSR, 1961.
587 p.

(Lumbering--Tables and ready-reckoners)

USSR / Cultivated Plants. Fruits, Berries.

M-7

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58756

Author : Pavlenko, F. A.

Inst : Dendrological Park "Veselye Bokoven'ki", Kirovograd Oblast'

Title : The Propagation of "Funduk" by Means of Green Scions

Orig Pub : Sad i ogorod, 1957, No 6, 59-60

Abstract : Experiments on green bud grafting of 14 funduk varieties were carried out at the dendrological park Veselye Bokoven'ki, Kirovograd Oblast in 1955. Well acclimatized varieties (70-90%) Ukraina 50, Pioner 66, Funduk No 85, Sovietskiy 86 and Stepnoy 83 and varieties which did not acclimate as well (20-30%) stood out. -- R. Garcia-Gonsales

Card 1/1

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PAVLENKO, F.A., kand.sel'skokhoz.nauk (Khar'kov)

Restoration of poplars. Nauka i zhyttia 11 no. 4:39 Ap '61.
(MIRA 14:5)
(Ukraine--Poplar)

Country : USSR

Subject : Forestry. Forest Cultures.

K

Periodical : CPBKh., No. 43 1978, No. 104552

Author : Pavlenko, F. A.; Starova, N. V.

Title : Growing Poplar Seedlings in the Ukraine

Language : Russ. Kh.-ve, 1978, No. 4, 22-26

Abstract : No abstract.

Page: 1/1

PAVLENKO, F.A.

[Cultivation of poplar seedlings.] Agrotekhnika vyrashchivaniia
seiantsev topolia. Khar'kov, 1958. 7 p.
(Poplar) (MIRA 11:12)

PAVLENKO, F. A.

USSR/Cultivated Plants - Fruits, Berries.

M.

Abs Jour : Ref Zhur - Biol., No 10, 1953, 44316

Author : Pavlenko, F.A.

Inst : Ukrainian Scientific Research Institute of Forest Management and Agricultural Forest Melioration.

Title : The Hazel Nut.

Orig Pub : Hauks i peredov. opyt v s. kh., 1957, № 5, 28-29.

Abstract : Varieties of hazel nut growing in the Ustimovsky Park in the Goriachkiy rayon of the Poltavskaya Oblast were used by the Ukraine Scientific Research Institute of Forestry and Agricultural Melioration of the Forests in the crossing with the bear nut, common hazelnut, Michurin and southern hazel nuts, and for obtaining new varieties by means of acclimatization. New winter and drought resistant varieties Michurinets 82, Stepnoy 83, Sovetsky 86 were

Card 1/2

- 157 -

PAVLENKO, F.A., kandidat sel'skokhozyaystvennykh nauk.

Filbert Corylus maxima. Nauka i pered.op. v sel'khoz. 7 no.5:28-29
My '57. (MLRA 10:6)
(Filbert)

ISHIN, D.P.; MATTIS, G.Ya.; ZHELTIKOVA, T.A.; PAVLENKO, F.A.;
KRYLOVA, V.I., red.; OKOLELOVA, Z.P., tekhn.red.

[Growing planting stock for shelterbelt afforestation]
Vyrashchivanie posadochnogo materiala dlia zashchitnogo
lesorazvedenia. [By] D.P.Ishin i dr. Moskva, Sel'khoz-
izdat, 1963. 406 p. (MIRA 17:3)

38210. PAVLENKO, F. A.

Leshchina raznolistnaya - tsennyy kustarnik dlya polesashchitnogo leso-
razvedeniya. Les 1 step', 1949, No 8, s. 17-23

1. PAVLENKO, F.A.
2. USSR (600)
4. Forest Nurseries
7. How one can best use the sod layer in forest nurseries. Iss 1 step' 4 no. 12 1952
9. Monthly List of Russian Accessions. Library of Congress. March 1953. Unclassified.

PAVLENKO, F. A.

Drill (Agricultural Implement)

Plans and methods for mechanizing sowing in the forest nursery. Les. kholz. 5 no. 9, 1952

Monthly List of Russian Accessions, Library of Congress, November 1952. Unclassified.

STANKOV, Petr Gavrilovich; PAVLENKO, Fedor Andrianovich, kand.
sel'khoz. nauk; ZAKHAROV, Z.A., red.

[Nursery of ornamental woody plants] Drevesno-dekorativ-
nyi pitomnik. Kiev, Urozhai, 1965. 273 p.
(MLia 19:1)

PAVLENKO, F. A.

Forest Nurseries

Plans and methods for mechanizing sowing in the forest nursery.

Les. khoz. 5 no. 2, 1952

9. Monthly List of Russian Accessions, Library of Congress, November 1952 [1953], XXXX, Uncl.

1. PAVLENKO, F. A.
2. USSR (600)
4. Filbert
7. New varieties of the lombard nut (*corylus maxima*).
Sad i og. No. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

1. TAVLENKO, F. A.
2. USSR (600)
4. Pine
7. Growing pine seedlings in the Alexandrovka forestry station. Les.khor.
6, No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

PAVLENKO, Fedor Andrievich, kand.sel'skokhoz.nauk; BREDIKHINA, L.,
_____, TIKHOF'YEVA, L., tekhn.red.

[Propagation of poplars] Razmnozhenie topolei. Moskva,
Gos.izd-vo sel'skokhoz.lit-ry, 1960. 62 p.

(MIRA 14:3)

(Poplar)

PAVLENKO, G., akademik

Driven by waves. Tekh.mot 30 no.11:30-32 '62. (MIRA 16:9)

1. Akademiya nauk UkrSSR.
(Ship propulsion) (Waves)

PAVLENKO, G.; ARSHAVSKIY, A., sovetnik yustitsii; KATANER, G.;
TSIPERFIN, I., inzh.; KRYANNIKOV, A., shofer; ZHALNIN, A.

Readers' letters. Avt. transp. 41 no.6:57-58 Je '63.
(MIRA 16:8)

1. Starshiy inzh. Ministerstva avtomobil'nogo transporta
Kirgizskoy SSR (for Kataner). 2. Oktyabr'skoye avtokhozyaystvo
Volgogradskogo avtoupravleniya (for Kryannikov).

PAVLENKO, G.

Role of credit supplied by the State Bank in developing the dairy,
industry. Den. i kred. 20 no.4:68-71 Ap '62. (MIRA 15:4)

1. Upravlyayushchiy Kiyevskoj oblastnoy kontoroy Gosbanka.
(Kiev—Dairy industry--Finance)

KRAMAROVSKIY, L.; ZUYEV, N.; PAVLENKO, G.; UL'KO, D.

Develop credit relations with intercollective farm building organizations. Den. i kred. 20 no.1:27-39 Ja '62. (MIRA 15:1)

1. Nachal'nik otdela kreditovaniya kolkhozov Moldavskoy kontoroy Gosbanka (for Zuyev). 2. Upravlyeyushchiy Kiyevskoy oblastnoy kontory Gosbanka (for lavlenko). 3. Upravlyayushchiy Dnepropetrovskoy kontoroy Gosbanka (for Ul'ko).

(Ukraine--Construction industry--Finance)
(Moldavia--Construction industry--Finance)
(Collective farms--Interfarm cooperation)

PAVLENKO, G.

From word to deed. Avt. transp. 41 no.5:33 My '63. (MIRA 16:10)

1. Starshiy ekonomist po trudu i zarabotnoy plate Volgogradskogo
avtomobil'nogo khozyaystva No.7.
(Transportation, Automotive--Management)

IVASHCHENKO, A.; PAVLENKO, G. [Pavlenko, H.]; KOVALISHIN, I.
[Kovalyshyn, I.]; PALIVODA, S. [Palyvoda, S.], red.;
NEDOVIZ, S., tekhn. red.

[New look of Western Ukrainian villages] Selo miniaie svoie
oblichchia. L'viv, Knyzhkovo-zhurnal'ne vyd-vo, 1960. 68 p.
(MIRA 15:12)

1. Sekretar' Peremishlyanskogo rayonnogo komiteta Kommunisti-
cheskoy partii Ukrainskoy (for Ivashchenko). 2. Predsedatel'
ispolnitel'nogo komiteta Sambirskogo rayonnogo Soveta deputa-
tov trudyashchikhsya (for Pavlenko). 3. Predsedatel' ispolni-
tel'nogo komiteta Rodatitskogo sel'skogo Soveta Gorodetskogo
rayona (for Kovalishin).

(Ukraine, Western--Rural conditions)

REVYAKIN, N.; PAVLENKO, G.; KADINSKIY, O.

Business and employees of the State Bank. Den. 1 kred. 18 no.10:25-
35 0 '60. (MIRA 13:10)

1. Krymskaya oblastnaya kontora Gosbanka (for Revyakin). 2. Kiyevskaya
oblastnaya kontora Gosbanka (for Pavlenko). 3. Starshiy inspektor
Leningradskoy gorodskoy kontory Gosbanka (for Kadinskiy).
(Banks and banking) (Bank employees)

PAVLENKO, G.A., fel'dsher (selo Zhadov Chernigovskoy oblasti)

Organization of health education and prophylactic work at the
feldsher midwife center. Fel'd i akush. 24 no. 2:52 Fe '59. (MIRA 12:3)
(ZHADEV (CHERNIGOV PROVINCE)--MEDICINE, PREVENTIVE)

PAVLENKO, G.A., fel'dhsar (selo Zhadov Cheraigovskoy oblasti).

Provide more accessible medical services for the rural public.
Fel'd. i akush. 23 no.9:47-48 S'58
(MIRA 11:10)
(MEDICINE, RURAL)

KOTS, G.A.; RAZUMNAYA, Ye.G.; ROZHKOVA, V.D.; PAVLENKO, G.G.; STEPANENKO, L.G.; ROZHKOVA, Ye.V., nauchnyy red.; KANTOKOL'SKAYA, A.M., red. izd-va; BYKOVA, V.V., tekhn. red.

[Methodical guide to the use of ore separation units for the mineralogical analysis of ores and rocks.] Metodicheskoe rukovodstvo po primeneniiu malogabarnykh ustanovok dlia mineralogicheskogo analiza rud i gornykh porod. Moskva, Gosgeotekhizdat, 1963. 110 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut mineral'nogo sýria. Trudy, no.10) (MIRA 17:1)

PAVLENKO, G.L.; VOL'PER, D.B.

Modulus of deformation of concrete and reinforced stanchions
subjected to longitudinal bending. Dop. AN URSR no.2:126-129
'57. (MLRA 10:5)

1. Dnipropetrov's'kiy metalurgiynyiy institut. Predstaviv akademik
AN URSR G.M. Savin.
(Reinforced concrete) (Elasticity)

SOV/124-58-4-4555

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 4, p 127 (USSR)

AUTHOR: Pavlenko, G. L.

TITLE: An Experimental Study of the Stability of Three-hinged Arches
Beyond the Limits of Elasticity (Eksperimental'noye issledovaniye
ustoychivosti trekhsharnirnykh arok za granitsami uprugosti)

PERIODICAL: V sb.: Issledovaniya po vopr. ustoychivosti i prochnosti.
Kiyev, AN UkrSSR, 1956, pp 170-175

ABSTRACT: Three-hinged circular arches with rectangular cross section made of №3 steel with a yield point of 24 kg/mm² were loaded at the crown with a 300-ton hydraulic machine. The hinge joints at the crown and the end joints consisted of ball bearings; the actual measuring of the load was done by a dynamometer installed at the crown, the measuring of the deflections was done by dial gauges and that of the strains by strain gauges at the middle sections of the semiarches. The experiments demonstrated an asymmetrical buckling. The critical force was determined in accordance with the formula $P_* = kEI/R^2$, where EI is the bending rigidity, R is the radius, and k is the coefficient obtained from the experiments, the values of which coefficient are given below

Card 1/2

L 10705-67 EMT(m)
ACC NR: A0030745

(A)

SOURCE CODE: UR/0193/00/CN/10705-67/000

AUTHOR: Pavlenko, G. L. (Dnepropetrovsk); Voriper, D. B. (Dnepropetrovsk)

CITE: Dnepropetrovsk Metallurgical Institute (Dnepropetrovskiy metalurgicheskiy institut)
TITLE: Experimental investigation of the stability of parabolic arches made of
reinforced concrete

SOURCE: Prikladnaya mekhanika, v. 2, no. 8, 1966, 47-50

TOPIC TAGS: civil engineering, structural engineering, reinforced concrete

ABSTRACT: The stability conditions of fixed parabolic arches are analysed on the basis of special tests conducted on two identical experimental arches. Both arches being built of the same reinforced concrete had a 10-m span, a rise of 3 m and a 12 x 8 cm cross-sectional area. Each arch was provided with suspended vertical ties dividing the span in 21 panels for carrying evenly distributed trial loads. Three photos are presented showing an intact arch before loading and then demonstrating the deformations observed in two arches after excessive loadings. The experimental results are compared with that obtained by calculations. A classical approach is applied to calculations of allowable loads and stresses. Since concrete is not perfectly elastic, the moduli of elastic and total deformations were calculated by using the data determined in testing concrete specimens. By introducing these moduli, the final formulas are derived and the theoretical and experimental results are favorably compared. Orig. art. has: 3 photos and 9 formulas.

SUB CODE: 13/ SUBM DATE: 24Jan66/ ORIG REF: 004

Card 1/1

L 23219-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(l) JD
ACC NR: AP6013591 SOURCE CODE: UR/0198/65/001/002/0124/0125

AUTHOR: Savin, G. N.; Pavlenko, G. L.

ORG: Institute of Mechanics, AN UkrSSR (Institut mekhaniki AN UkrSSR)

TITLE: Machine for fatigue-testing wire with a cyclical, variable load

SOURCE: Prikladnaya mekhanika, v. 1, no. 2, 1965, 124-125

TOPIC TAGS: wire, metal test, fatigue test, cyclic load, physics laboratory instrument

ABSTRACT: The machine, covered by USSR patent #26104/449986, performs testing of wire by simultaneous application of stretching and bending, determining the limit of fatigue with an eccentric cycle. An electric motor is used to supply the eccentric-action bending stress, and a clamp and spring arrangement supplies the stretching stress. As envisaged by the authors, the machine has four racks for four wire samples and is driven simultaneously by the same electric motor for multiple testing of several samples. Orig.art. has: 2 figures. [JPRS]

SUB CODE: 13, 20 / SUBM DATE: 08Apr64

Cord 1/1 Rev

SAVIN, G.M.; PAVLENKO, G.L.

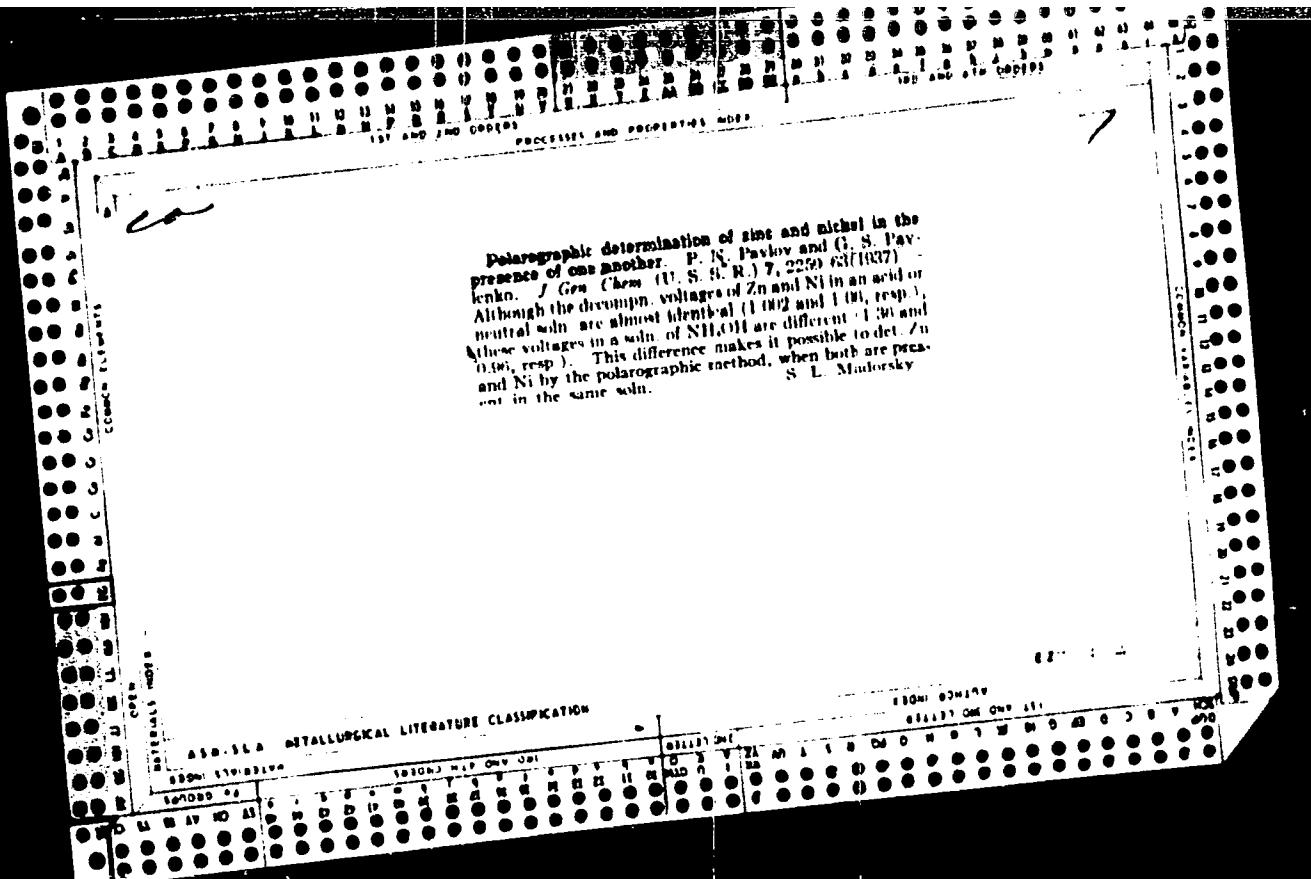
Patigue limit for wires of steel hoisting cables. Dep.AN URSR no.4:
27-31 '48. (MIRA 9:9)

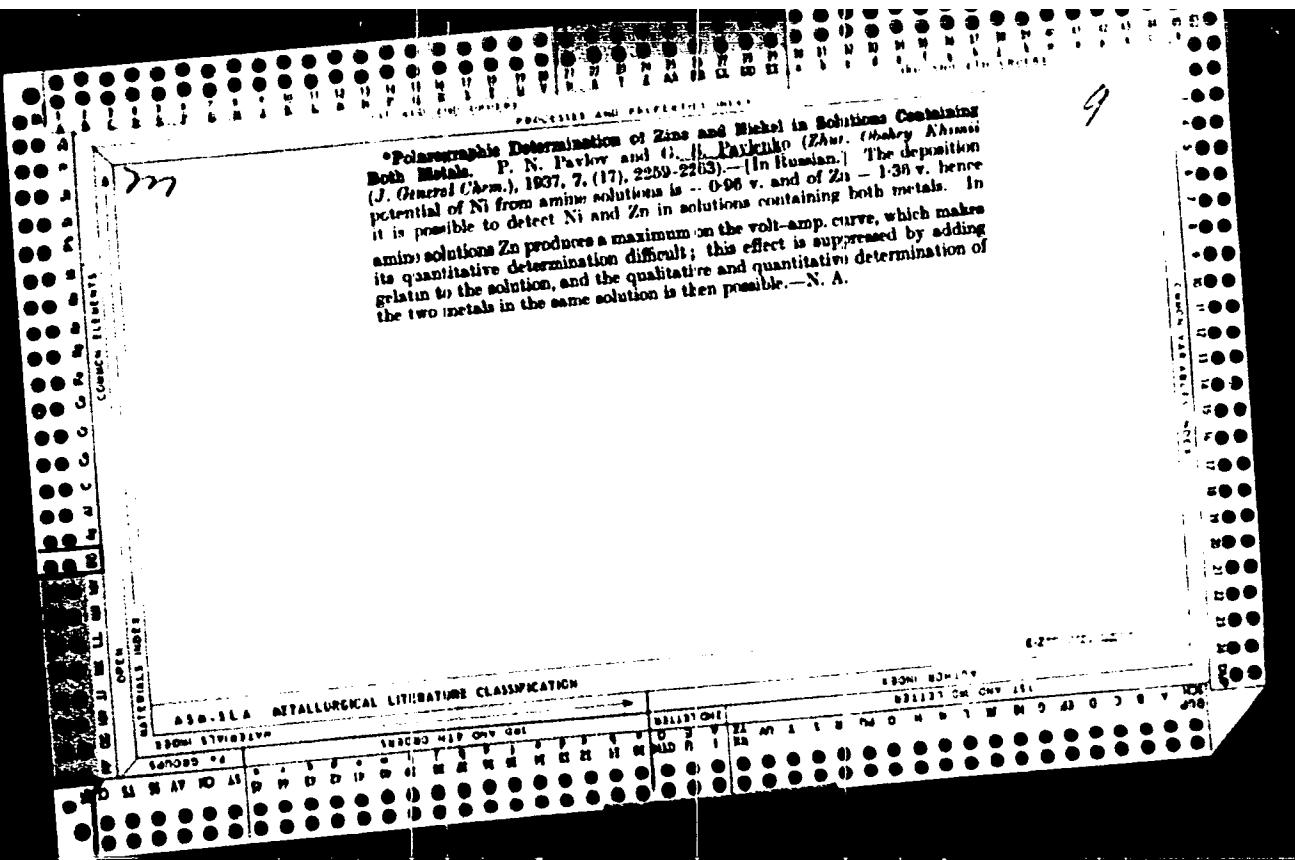
1. Diysniy chlen AN URSR (fer Savin). 2. Lviv's'kiy viddil Institutu
girmichei mekhaniki Akademii nauk Ukrains'koi RSR.
(Wire rope)

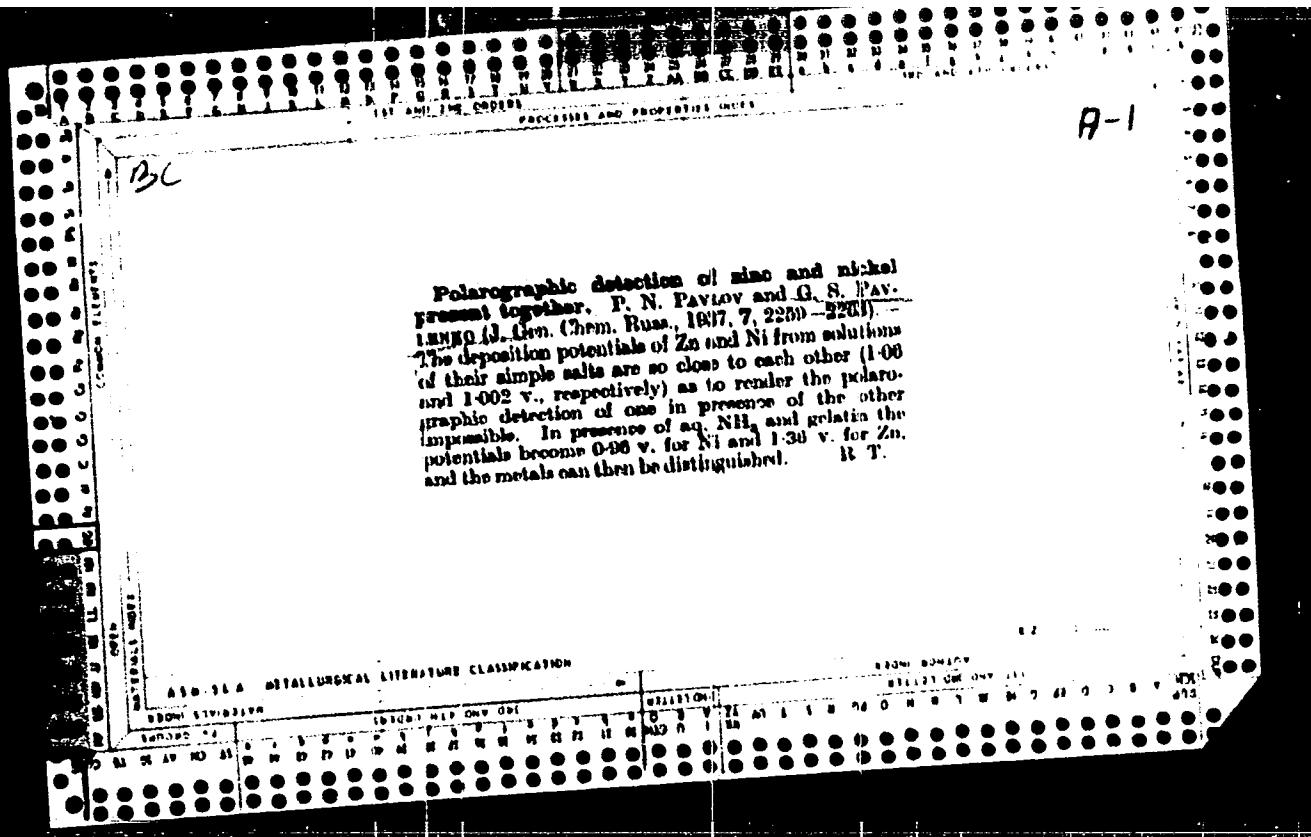
PAVLENKO, G. L., dotsent, kandidat tekhnicheskikh nauk

Elasticity modulus of steel hoisting cables. Gor. zhur. 122
no.1:25-29 Ja '48. (MIRA 8:9)

1. Akademiya nauk USSR, Institut gornoy mehaniki imeni M.M.Ye-
dorova. (Cables--Testing) (Hoisting machinery)







PAVLENKO, G.V.

Method of calculating winter precipitation in the steppe zone
of Western Siberia. Izv. Sib. otd. AN SSSR no.11:95-104 '58.
(MIRA 12:2)

1. Zapadno-Sibirskiy filial AN SSSR.
(Siberia, Western--Precipitation (Meteorology))

3 (7)
AUTHORS:

Mosiyenko, N. A., Pavlenko, G. V.,
Khudomyasova, Yu. V.

SOV/50-59-8-6/19

TITLE:

Evaporation From the Surface of the Snow Cover Under the Conditions Prevailing in the Steppe Areas of West Siberia (Ispareniya s poverkhnosti snezhnogo pokrova v usloviyakh stepnykh rayonov Zapadnoy Sibiri)

PERIODICAL:

Meteorologiya i hidrologiya, 1959, Nr 8, pp 24 - 27 (USSR)

ABSTRACT:

Considering the contradictory data of the amount of evaporation from the surface of a snow cover (Refs 10, 3, 4, 5, 9, 12), the results of observations carried out during the melting period by the Gidrologicheskaya ekspeditsiya Zapadno-Sibirskogo filiala AN SSSR (Hydrological Expedition of the West Siberian Branch of the AS USSR) with the participation of the author in spring of 1952 in the area of the reservoir of the Novosibirskaya GES (Novosibirsk Hydroelectric Power Station), and in spring of 1955, 1956, and 1957 in the area of the Kulundinskaya Steppe and Ishimskaya Steppe, are put forward here. The evaporation was determined by exposition of snow samples in vessels with subsequent weighing with an accuracy up to 0.01 g. Cylindrical

Card 1/2

Evaporation From the Surface of the Snow Cover Under SOV/50-59-8-6/19
the Conditions Prevailing in the Steppe Areas of West
Siberia

vessels with a base of 200 cm², and 5 cm high, were used. At a distance of 1.5 cm from the bottom of the vessel, a net separator was attached for separating the snow from the water during melting. The evaporators were placed so deep into holes that the snow surface in them lay on the same level with the surface of the snow cover. On the basis of the data obtained, the following facts are ascertained: 1) The evaporation from the snow cover under the conditions of West-Siberian steppes is unimportant, and amounts to about 3-5 mm during the whole melting period. 2) In dull weather in spring, there is nearly no evaporation from the surface of the snow cover, since condensation exceeds evaporation in most cases. 3) In fine weather in spring, evaporation prevails at the beginning of the melting period, and condensation at the end of it. There are 2 figures, 1 table, and 12 Soviet references.

Card 2/2

PAVLENKO, G.V.

Calculating the maximum discharge of spring floods in the Kulunda
Steppe. Trudy Transp.-energ.inst. Sib. otd. AN SSSR no.13:51-73 '61.
(MIRA 15:6)

(Kulunda Steppe--Floods)

BAYUSHEVA, M.I.; PAVLENKO, G.V.

Average annual and maximum runoff of rivers in the southern regions
of Western Siberia. Trudy Transp.-energ.inst. Sib. otd. AN SSSR no. 1
15-49 '61. (MIRA 15: 1)
(Siberia, Western--Runoff)

PAVLENKO, G. V. Cand Geog Sci -- "Spring water drainage in the Kulundinskaya Steppe and the possibilities of its forecast and calculation." Mos, 1961
(Main Administration of the Hydrometeorological Service under the Council of Ministers USSR. Central Inst of Forecasts). (KL, 4-61, 189)

-92-

PAVLENKO, Galina Vasil'yevna; ABRAMOVICH, D.I., doktor geogr.
nauk, prof., otv. red.; BUSHUYEVA, V.M., red.; LOKSHINA,
O.A., tekhn. red.

[Spring runoff in the Kulunda Steppe and the possibilities
of forecasting and calculating it] Vesennii stok v Kulundin-
skoi stepi i vozmozhnosti ego prognozov i raschetov. Novo-
sibirsk, Izd-vo Sibirskogo otd-niya AN SSSR, 1963. 146 p.
(MIRA 17:4)

PAVLENKO, G.V.

Experimental investigation of rotating flow separation. Izv.vys.
ucheb.zav.; av.tekh. 5 no.1:92-104 '62. (MIRA 16:7)

1. Khar'kovskiy aviationskiy institut, kafedra gazotermodinamiki
i reaktivnykh dvigateley.
(Aerodynamics)

YERSHOV, V.N., kand.tekhn.nauk; STEPANOV, Yu.V., kand.tekhn.nauk; PAVLENKO,
G.V., inzh.; BREKHOV, A.E., inzh.

Expanding the field of stable performance of the axial compressor
stage. Teploenergetika 9 no.2:41-44 F '62. (MIR 15:2)

1. Khar'kovskiy aviationsionnyy institut.
(Compressors)

YERSHOV, V.N.; PAVLENKO, G.V.

Conditions of approximate similarity for single-stage gas
turbines. Sovr. trud. lab. gidr. mash. no.7:154-161 '58.
(MIRA 12:9)
(Gas turbines)

PAVLENKO, G.V.

Characteristics of the formation of spring runoff in the steppe zone of Western Siberia (Kulunda Steppe). Trudy Kazan. fil. AN SSSR. Ser. energ. i vod. khoz. no.4:86-95 '59. (MIRA 13:8)

1. Laboratoriya girologii i gidrotekhniki Transprotano-energeticheskogo instituta Zapadno-Sibirekogo filiala AN SSSR.
(Kulunda Steppe--Runoff)

YERSHOV, V.N.; PAVLENKO, G.V.

Rotating stall in the elementary stage of an axial-flow
compressor. Izv.vya.ucheb.zav.; av.tekh. 2 no.3:64-71 '59.
(MIRA 12:12)

1. Khar'kovskiy aviatcionnyy institut. Kafedra lopastnykh
mashin i prikladnoy gazovoy dinamiki.
(Aircompressors)

84049

S/147/60/000/003/008/018
E191/E481

26.2120

AUTHORS: Yershov, V.N. and Pavlenko, G.V.

TITLE: Rotating Flow Separation in a Stationary Annular
Cascade of Blades

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Aviatsionnaya
tekhnika, 1960, No.3, pp.51-56

TEXT: The principle of the maximum flow of mechanical energy through the critical cross-section is the criterion of stability for the motion of a continuous medium. It defines the pattern of motion in axial turbo-machines in stable operation and permits an analysis of unstable conditions when the axial symmetry is disturbed by rotating separation. Referring to the senior author's previous work (same periodical, 1959, No.1 and 3 and 1960, No.1), the conditions for a transition from axially symmetrical flow to a rotating separation are formulated as relations between the total pressure and the axial velocity components. An analysis of the quantities involved shows that a pattern of flow with shifting zones of separation is possible not only in rotating but also in stationary cascades. Such rotating separation has not hitherto been observed in stationary annular

Card 1/3

X

84049
S/147/60/000/003/008/018
E191/E481

Rotating Flow Separation in a Stationary Annular Cascade of Blades cascades. A special test rig was made to observe this phenomenon. Air was blown into an annular channel where it first traversed an adjustable annular cascade of blades where it acquired a tangential component of velocity. The investigated cascade with a hub ratio of 0.82 was assembled on a cylinder somewhat larger than the internal cylinder of the annular channel so that the boundary layer formed on the inside wall was sucked away through the clearance between the two cylinders. The solidity, inlet and outlet angles of the blades in the investigated cascade remained unchanged along the radius. The blade incidence was adjustable. Low inertia condenser type pressure transmitters were used, suitable for amplification at any frequency between 0 and 2000 cps. Such transmitters were installed ahead of and behind the examined cascade and immediately behind the guide vanes. Tests were carried out with a cascade of a chord/pitch ratio of 1.2 having 38 blades of 40 mm chord and 30°, camber set at an angle of 55°. The tests were run at a Reynolds Number of about 17000. Some recordings of the fluctuating pressure are reproduced in Fig. 3 and 4, showing various types of separation including rotating

X

Card 2/3

26.2120
S/147/62/000/001/011/015
E191/E135

AUTHOR: Pavlenko, G.V.

TITLE: Experimental investigation of rotating stall

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Aviatsionnaya tekhnika, no.1, 1962, 92-104

TEXT: Rotating stalls in an experimental single-stage short-blade axial compressor on a test-bed stand have been studied at the Khar'kovskiy aviatsionnyy institut (Khar'kov Aviation Institute). The study is part of research supervised by V.N. Yershov who, with G.V. Pavlenko as co-author, presented an essentially new theoretical method for analyzing rotating stalls in a previous paper (Ref.2: Izvestiya vuz, Aviatsionnaya tekhnika, no.3, 1959; Ref.3: Izvestiya vuz, Aviatsionnaya tekhnika, no.3, 1960). It is known that there is virtually no change in the shapes of complete-stall zones and their propagation speed through the cascade during steady operation. The momentary values of flow velocities and total and static pressures at mean radius points were therefore recorded at four

Card 1/3

Experimental investigation of ... S/147/62/000/001/011/015
E191/E135

rotating stall to be regarded as a non-stationary but stable flow pattern in an axial-flow stage. 6) The stall-zone propagation speed is determined by the relationship

$$\bar{u}_3 \simeq 1 - \frac{1 - k^2}{ak} \bar{H}_{th*} \sin \gamma \quad (1)$$

where: k is a coefficient giving the relation between the circulation around a profile and the strength of the shed vortices ($k < 1$); $a = f(b/t)$ is the coefficient of resistance to zone propagation in relation to the cascade; b/t is the relative solidity of the rotor blades; H_{th*} is the theoretical pressure coefficient corresponding to the condition of maximum total pressure of the rotor cascade.

There are 15 figures and 1 table.

ASSOCIATION: Kafedra gazotermodinamiki i reaktivnykh dvigateley,
Khar'kovskiy aviationsionnyy institut

Card 3/5 (Department of Gasthermodynamics and Reaction Motors,
Khar'kov Aviation Institute)

SUBMITTED: January 30, 1961

31057

S/096/62/000/002/001/008
E194/E435

26 2120

AUTHORS: Yershov, V.N., Candidate of Technical Sciences.
Stepanov, Yu V., Candidate of Technical Sciences
Pavlenko, G.V., Engineer Brekhov A.F., Engineer

TITLE: Extending the region of stable operation of an axial compressor stage

PERIODICAL: Teploenergetika, no. 2, 1962, 41-44

TEXT: A typical form of instability in axial compressors operating at low speeds is the formation of rotating zones of breakaway of fluid from the blades. These zones of breakaway usually begin only at the blade roots or tips but increase as the amount of throttling is increased and at very low rates of flow may cover the entire blade length. In multi-stage axial compressors running below the rated speed, critical angles of incidence occur mainly on the first stages or on stages immediately beyond air bleeding points. Total breakaway may occur on a few stages but may sometimes occur on all with great loss of efficiency. The trouble can be overcome by increasing the flow through the early stages but this is wasteful. Attention to blade design cannot

Card 1/3

S/096/62/000/002/001/008
E194/E435

Extending the region of stable ...

give much improvement. Theoretical investigations of the stability of an axially symmetrical flow indicate that when stability is lost flow may take one of two forms: with the formation of rotating zones of breakaway, or with an axially symmetrical annular zone of breakaway, or annular swirl, associated with the occurrence of a counter flow. The relative stabilities of these two kinds of flow vary according to circumstances but, by promoting annular swirl, it is in principle possible to prevent completely the formation of rotating zones of breakaway. Tests were made with compressor stages in which various measures had been taken to promote annular swirl, namely: cutting annular slots in the casing just ahead of and just beyond the tips of the blades; installing an annular step or ridge in the casing just in front of the ring of blades; also, blowing air into an annular slot located just ahead of the blades. All of these measures were found to extend the zone of stable operation; however, the most convenient and structurally simple is that of blowing air through an annular slot. With this stage, tested when air was blown in at a head two or three times greater than that of the stage, the boundary of stable

Card 2/3

PAVLENKO, G.V.

Determining loss of runoff in short-range forecasts of rain
floods of rivers of Transcarpathia. Trudy UkrNIGMI no.51
(MIRA 13:9.
82-86 '65.

L 30955-66 EWT(d)/EWT(1)/EWT(m)/T-2/EWP(f) VM/JD

ACC NR: AP6013391

SOURCE CODE: UR/0096/66/000/005/0089/0090

AUTHOR: Yershov, V. N. (Candidate of technical sciences); Pavlenko, G. V. (Candidate of technical sciences); Nikolayenko, Yu. G. (Engineer)

ORG: Khar'kov Aviation Institute (Khar'kovskiy aviatcionnyy institut)

TITLE: Determining the discharge coefficient when calculating anti-surge bleed ports in axial compressors

23

SOURCE: Teploenergetika, no. 5, 1966, 89-90

TOPIC TAGS: compressor, compressor surge, compressor operation stability

ABSTRACT: Air bleeding from a compressor stage into the atmosphere is considered to be one of the simplest and most effective methods of expanding the range of stable operation of a multistage axial compressor. The discharge coefficient μ of a bleed port is usually determined from detailed experimental data for the general discharge of a fluid through an opening, without taking into account the special flow characteristics in a compressor stage before the bleed port. To investigate the accuracy of this method, experiments were conducted to determine the bleed port discharge coefficient under various bleed conditions. Tests were conducted with a ten-stage axial compressor in the range of bleed flow Re numbers of $0.3 \cdot 10^5 - 1.2 \cdot 10^5$ and M numbers of 0.1-0.4 with various locations for the bleed ports. The obtained results are shown in Fig. 1. Based on the experimental data, it is concluded that

Cord 1/2

UDC: 542.78.001.45

L 30955-66

ACC NR: AP6013391

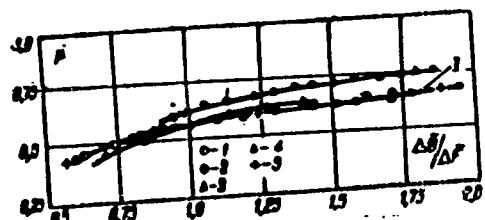


Fig. 1. Relationship between discharge coefficient μ and parameter $\Delta g/\Delta F$ for various locations of the bleed ports. ($\Delta G = \Delta g/\Delta F$ - relative air bleed; ΔG - mass flow rate through bleed port; ΔF - ratio of the bleed port area and the area of the ring corresponding to the blade height) Fifth stage (1-4) bleed port locations:

- 1 - Above guide vanes; 2 - above rotor;
- 3 - above guide vanes and rotor; 4 - axial clearance before rotor; 5 - eighth stage.

the discharge coefficient is dependent on the location of the bleed ports, and is highest for the bleed ports above the rotor blades and in the axial clearances before the rotor. The obtained values of μ shown in Fig. 1 can be used directly in calculating anti-surge bleed ports in axial compressors. However, for ports having shapes and Re and M numbers different from those investigated, μ should be corrected using the following expression:

$$\mu' = \mu \cdot k_1 \cdot k_2 \cdot k_3$$

where, μ' is the corrected value; μ , value from Fig. 1; and k_1 , k_2 and k_3 , the correction factors. The results also showed that air bleeding from a compressor has a strong effect on the flow characteristics in the stages adjacent to the bleeding stage. Orig. art has: 2 figures.

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 001/ ATD PESS: 4241

[AS]

Card 2/2 0/C

PAVLENKO, G. Ya.
USSR/Biology

FD-2517

Card 1/1 Pub. 17-16/20

Author : Alov, I. A.; Pavlenko, G. Ya.; Sukhinina, M. V.

Title : On the reflex mechanism of the regulation of cellular division

Periodical : Byul. eksp. biol. i med. 4, 63-65, Apr 1955

Abstract : Investigated the role of the nervous system in the regulation of cellular division. Pinched the tails of white mice, sacrificed them 1-1 1/2 hours later, then studied the rate of mitosis in the corneal epithelium and compared this rate with controls. Tables. Four references, three of them USSR (since 1940).

Institution : Chair of Histology (Head - Dotsent I. A. Alov) of the Khabarovsk Medical Institute

Submitted : December 10, 1954 by V. N. Chernigovskiy, Member of the Academy of Medical Sciences USSR

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239520010-8

PAVLENKO, G. Ye.

"Ship Motions," Gostransizdat, 1935

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239520010-8"

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239520010-8

PAVLENKO, G. Ye.

"Theory and Calculation of the Pitching of Ships," Tr. IKI, 1939

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239520010-8"

PAVLENKO, G. YE.

TA 57T23

USSR/Engin

Dec 1947

Ships - Roll and Pitch
Ships - Stabilization

"Theory of Rolling and the Stability of a Ship in
Heavy Seas," G. Ye. Pavlenko, 16 pp

"Izv Akad Nauk SSSR, Otdel Tekh Nauk" No 12

Summary of results of experiments and tests conducted
over period of years to determine effect of rolling on
stability of ship. Discusses roll on quiet sea with
absence of resistance, roll on quiet sea when resist-
ance is present, roll during heavy seas, the hyperbole
of safety, and methods to calculate the disturbing
force. Submitted by Academician V. L. Pozdnyunin,
9 Apr 1946.

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42583. Metoo Rascheta Bvezopasnosti Korabley Na Volnenii. Nauch. Trudy (Odes. In-T
Inzh. Mor. Flota). vyp. 7, 1948, s. 14-30,

PAVLENKO G.YE.

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tekhnicheskiy redaktor.

[Set of diagrams for the control and regulation of ship loads;
practical manual for seamen and workers of the merchant marine]
Pribor dlia kontrolya i regulirovaniia nagruzki sudov. Prakticheskoe
rukovodstvo dlia plavaiushchego sostava i rabotnikov sluzhby
ekspluatatsii morskogo flota. Izd. 2-e, ispr. i dop. Odessa, Vod-
transizdat, 1953. 50 p.
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(MLRA 7:12)

G.Ye

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MEGACHEVA, M.N., tekhnicheskiy redaktor

[Resistance of water to the movement of ships] Soprotivlenie
vody dvizheniiu sudov. Moskva, Gos.izd-vo vodnogo transporta,
1953. 506 p. (MLRA 9:1)
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kontrolia i regulirovaniia nagruzki sudov. Moskva, Vodtransizdat,
1954. 120 p.
(MLRA 7:12D)

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ACC NR. AM6002139

Monograph

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Bt1Pavlenko, Georgiy Testaf'yevich

Vector method for providing safety of ship navigation (Vektornyy metod obespecheniya bezopasnosti plavaniya sudov) Kiev, Naukova dumka, 1965. 149 p. illus., biblio., tables., fold charts (in pocket) (At head of title: Akademiya nauk Ukrainskoy SSR. Institut gidromekhaniki) 800 copies printed.

TOPIC TAGS: marine engineering, shipbuilding engineering, ship navigation, cargo ship, material handling

PURPOSE AND COVERAGE: This book is intended for scientific, engineering, and technical personnel in shipbuilding, as well as for ship's officers and other personnel in water transportation; it may also be used as a textbook by teachers and students in higher educational institutions in related fields. The book contains a detailed treatment of the vector method for providing safety of ship navigation, and includes the theoretical basis of the method and a description of and methods for the practical use of the plotting board in the solution of various operating problems. Described for the first time is the design of an automatic instrument for monitoring safety and controlling the loading of a ship. The instrument's design is based on the vector method and its use

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in the solution of practical operating problems is discussed. The utilization of safety control means is shown for purposes of the systematic analysis of a ship's seaworthiness for various possible loading schemes.

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